Is ANC Using Its Incumbency Advantage to Retain Power: An Investigation of Political Budget Cycles in South Africa.

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Abstract

Incumbent governments tend to induce political budget cycles (PBCs) during election years by increasing consumption spending just before an election and contracting spending thereafter. The research report demonstrates that even though South Africa has a dominant party framework, the African National Congress (ANC) which is the ruling party, has both an incentive and ability to use its incumbency advantage to retain power by creating PBCs on the national level and provincial level. This empirical study which is based on a data set consisting of annual observations of the South African national budget from 2001 to 2019, provides evidence of PBCs on the national level in the budget balance, provincial equitable share and social services, as well as evidence of political revenue cycles in total revenue and tax revenue for the 2004, 2009 and 2019 elections but not 2014. On the provincial level, fluctuations in transfers are detected during election years in all provinces except in the Eastern Cape and North West provinces. I show that the magnitude of PBCs on the national and provincial government levels are more pronounced in the earlier elections and have since decreased suggesting that the ability of the ANC to induce PBCs may be diminishing.

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1. Introduction

South Africa has been a democracy for the past 26 years and only one political party; the ANC, has won every national election since then. Support for the ruling party has however not remained constant. According to the Independent Electoral Commission (IEC), the ANC had an increase in voter support from 62.0 per cent in 1994 to 66.3 per cent in 1999, peaking at 69.7 per cent in 2004. Since then, there has since been a gradual decrease in support to 65.9 per cent in 2009, 62.2 per cent in 2014 and, the lowest since the dawn of democracy; 57.5 per cent in 2019. The ANCs strongest contender, Democratic Alliance (DA), had an increase in support from 12.4 per cent in 2004 when the party first participated in the National Assembly elections to 22.2 per cent in 2014. The party, however, experienced a decline in support to 20.8 per cent in the 2019 elections (IEC, 2019).

The ANC has incumbency advantage, namely, “the electoral margin a candidate enjoys because of her status as an incumbent running for re-election”, which may explain how the party has managed to retain power, albeit declining, in the past elections (Gordon, Huber and Landa, 2009, p.1481). This advantage which is investigated in this paper is the ability to increase deficit spending in order to increase votes, thus creating Political Budget Cycles (PBCs).

Budget allocations do not entirely depend on the ANC as expenditure estimates are submitted by government departments and recommendations are made by the Medium Term Expenditure Committee (MTEC) before being tabled in parliament where deliberations are made followed by the adoption of a fiscal framework. However, the ANC enjoys power in the Executive and has the majority seats in the National Assembly which votes to pass the budget through the Appropriation Bill.

There is a gap in the literature on PBCs in South Africa at the national government level as it has been argued that South Africa has the highest fiscal transparency ranking globally per the Open Budget Index (2019). The expectation is that a high fiscal transparency constraints the incumbent from manipulating fiscal policy and reduces the incentive to raise deficits prior to elections as the electorate has information on the real costs and benefits of government decisions and will thus punish incumbents that induce PBCs.

Another reason for the gap in the literature on PBCs on the national level is that South Africa is a dominant party system. As such, the expectation is that there would be no impetus to engage PBCs on the national level. The ANC (African National Congress) does not have strong electoral support in all nine provinces and thus due to competition, there is motivation to rather induce PBCs on the subnational level by increasing per capita transfers through conditional grants during election years (Kroth, 2012).

However, there is a possibility of PBCs on the national government level because while South Africa has a high fiscal transparency score, participation by the majority of the population in the budget process is low. South Africa is also both a developing country and a fairly new democracy thus susceptible to PBCs as suggested by empirical evidence (Drazen, 2005). The ruling party has been losing support in recent elections further providing an incentive for PBCs on the national level.

Elections of the National Assembly in South Africa take place once every five years during the first quarter of the fiscal year which covers the duration from the 1st of April to the 31st of March the next year. Given that the election cycle is predetermined, the ruling party has an opportunity to manipulate fiscal variables prior to elections in an attempt to lobby for votes (Shi and Svensson, 2002; Schuknecht, 2000; Shahor, 2013). Spending allocation to these variables which can include public goods, transfers and subsidies, and compensation of employees in the public sector, is expected to increase pre-election and reduce post-election. Another option presented by the predictability of the timing of elections is that the incumbent government can delay contractionary policies before the election and then implement the contractionary policies after the election.

The existing literature by Kroth (2012) which covers the first four democratic elections in South Africa finds that PBCs are driven by the non-formula-based component of the intergovernmental transfer, that is, the conditional grants. This paper will investigate if there are significant fluctuations in both the conditional grants and the formula-based equitable share during election years given the ANC has faced added pressure brought about by the decline in support in the past two elections.

Given provincial budgets are mostly financed by intergovernmental transfers, this paper will also investigate if there is a bias towards politically competitive provinces wherein support for the ANC is threatened such that they receive higher transfers during election years thereby inducing cycles. The transfer of interest is the conditional grant which is at the discretion of the central government thus can be attributed to the generosity of the ANC unlike the equitable share which is formula-based thus might not have the intended effect of swaying votes.

Motivated by the gap in literature, this paper will investigate whether the ANC has been using its incumbency advantage to induce political budget cycles in order to regain and retain votes during election years on the national level and the provincial level. The ANC has both the means (redirecting spending to visible projects as well as changing the composition of government expenditure) and an incentive to induce political budget cycles given electoral contestation has been higher in the recent elections.

This paper finds PBCs on the national level in the budget balance, provincial equitable share and social services as well as political revenue cycles in total revenue and tax revenue for the 2004, 2009 and 2019 elections. On the provincial level, significant fluctuations are detected in all provinces, except the Eastern Cape and North West provinces during election years in both the conditional grants and equitable share.

2. Theoretical Setting

The nature of election cycles in democratic countries means incumbent political parties have an inherent conflict of interest when making decisions that impact economic policies especially when close to elections. According to Downs, “politicians act like any other utility maximising consumer or profit maximising entrepreneur; the only difference is that they are in the business of maximising the number of votes they collect in an election” (Downs, 1957, p. 137). Political impulse is to lobby for as many votes as possible and worry about the consequences later thus government expenditure is likely to be distorted towards policies with high visibility (e.g., tax reductions, increased public spending on issues sensitive to voters) which will increase the chances of re-election by relying on a myopic electorate (Nordhaus, 1975). The manipulation of fiscal instruments in the national budget in order to signal competence leads to fluctuations in the government budget in elections years called political budget cycles (PBCs).

Asymmetric information, whereby the incumbent has more information about their level of competence than the electorate, enables the incumbent to feign competence by improving voter welfare prior to elections as voters tend to make conclusions on the incumbent's ability by observing fiscal policy instruments. As such, the election years can be characterised by a cutting down of taxes and an increase in consumption spending and transfers to signal competence as voters favour candidates who lower taxes and spend more on public goods and services (Shi and Svensson, 2002).

Though a PBC benefits people in the short run due to an increase in spending on consumption goods, its effects are detrimental in the long run as it increases budget deficits and the government may be forced to borrow, print money, increase taxes or implement budget cuts. An informed and rational electorate would thus punish incumbents that engage PBCs thereby reducing the chances of re-election. The level of knowledge voters have about fiscal policy differentiates the magnitude of PBCs in developing and developed countries (Schuknecht, 2000; Brender and Drazen, 2003). However, this does not mean PBCs do not exist in the public consumption domain in developed countries as governments can implement indirect expansionary measures, that is, reprioritise spending to specific projects such as infrastructure and services without necessarily increasing spending.

3. Agents

3.1. Voters

In time period (t), personal consumption c_t equals personal income y_t minus a lump sum tax θ_t which is used to pay for publicly provided goods g_t. I assume that personal income is constant over time:

$$c_t = y_t - \theta_t \tag{1}$$

The paper assumes like Garofalo, Lema and Streb (2019) that utility u_{ht} is quasilinear in g_t and logarithmic in c_t. Each individual h differs in the shock α_t which represents the degree to which voters prefer the opposition party relative to the ruling party and is identically and independently distributed over time. The median voter is thus not affected by the shock.

$$u_{ht} = g_t + \delta \ln(c_t) + \alpha_{ht} \tag{2}$$

The government expects voters to be rational thus voters will select the government most beneficial to them by voting based on changes in their utility from government spending during the election period as well as the alternatives offered by opposition parties.

The electorate's expected utility over the time period j to t when the incumbent is in power is given by the discounted sum:

$$U_{ht} = E_t \left[\sum_{j=t}^{\infty} \beta^{j-t}\, u_{ht}\right] \tag{3}$$

3.2. Incumbent

Like any other agent in the division of labour, the incumbent government has a private motive which is to increase the number of votes and a social function which is to create and implement policy. According to Downs (1957), politicians "do not seek to gain office in order to carry out certain preconceived policies or to serve any particular interest groups; rather they formulate policies and serve interest groups in order to gain office" (Downs, 1957, p.137).

The paper assumes like Garofalo et al. (2019) that the objective function of the incumbent v_t is a function of national publicly provided goods g_t, consumption c_t in every province *i* weighted by its share in the total population s_i, alignment of the province to the incumbent I_t, and utility from being in office $\cup_p$. If the incumbent is in office $\cup_p$>0. The indicator function $I_t = 1$ if the province is aligned to the incumbent otherwise $I_t = 0$

$$v_t = g_t + \sum_{i=1}^{I} s_{it}\, \delta \ln(c_t) + I_t + \cup_p \tag{4}$$

The incumbent uses fiscal instruments to maximise utility thus the budget balance worsens in election years. Taxes θ_t are constant in election years therefore the budget deficit is financed by debt d_t. The incumbent's constraint in the election year is:

$$g_t = \theta_0 + d_0 + d_t + \varphi_t \quad (5)$$

Where d_0 is the optimal deficit and φ_t is the incumbent's competence level such that a high competence level will lead to a high provision of public goods. However, the incumbent will be forced to reduce this increased provision of public goods after elections as additional debt to keep up with the election year provision is costly. This is because the incumbent government will need to pay debt servicing costs as well as make debt repayments. If the economy is not generating enough revenue given taxes are constant, this may result in a repayment default and may lead to even higher costs should the country continue borrowing. As such, the high cost of debt will lead to contractionary policies in a bid to run a quasi-surplus in order to pay any avoidable post-election deficit.

The incumbent's expected utility function is therefore:

$$V_{ht} = E_t \left[\sum_{j=t}^{\infty} \beta^{j-t} v_{ht}\right] \quad (6)$$

3.3. Opposition Party

The strategies of the opposition part are informed by their view of what maximises the utility of the voters from public goods g_t and on the actions taken by government v_t . The opposition party will then create their campaigns and manifestos based on this information although they tend to be disadvantaged as the ruling party often has the budget as a tool for accumulating votes as well as greater war chests and media coverage (Gordon et al., 2009).

4. Literature Review

4.1. Origin of PBC Theory

In the 1970s, scholars used an exploitable Phillips curve which shows an inverse relationship between unemployment and inflation to explain opportunistic political business cycles (Kramer, 1971; Nordhaus, 1975; Tufte 1975). The government would engage expansionary monetary policies during election years to improve real macroeconomic outcomes in order to gain votes and thereafter economic deterioration would follow post-elections given the increase in inflation. This would force the government to introduce austerity measures. The success of political business cycles to secure votes was largely dependent on the assumption that the electorate was naïve and myopic (Nordhaus, 1975). This form of political business cycle theory is not currently possible in South Africa as the central bank, namely the South African Reserve Bank (SARB), is independent. However, the ANC is still able to use fiscal policy to accumulate votes.

Lack of empirical evidence to support the existence of political business cycles; that is, exploitation of monetary policy to garner voter support, as well as the emergence of independent central banks and increased financial integration, brought the theory into disrepute but laid the foundation for the political budget cycles (PBCs) theory. PBCs which are based on the rational expectations theory, present rational, forward-looking voters who know that a lower unemployment rate and boost in economic growth during election years will doubtless lead to higher unemployment rates and a lower standard of living post-elections.

The ruling party running for re-election at the national or subnational level has an incumbency advantage to signal competence through the increased provision of goods and services in order to secure votes. This leads to political budget cycles which are enabled by asymmetric information (Rogoff, 1990; Shi Svensson, 2006; Lohmann ,1998), low fiscal transparency (Alt and Lassen, 2006) and media bias (Veiga and Efthyvoulou, 2017).

4.2. Asymmetric Information

The world we live in has imperfect information such that "(1) parties do not always know exactly what citizens want: (2) citizens do not always know what the government or its opposition has done, is doing, or should be doing to serve their interests; and (3) the information needed to overcome both types of ignorance is costly" (Downs, 1957, p. 139).

PBCs at the national and provincial government levels are driven by information asymmetries in the model-theoretic literature which can be grouped into adverse selection (Rogoff, 1990) and moral hazard (Shi Svensson, 2006; Lohmann, 1998) models. Because of asymmetric information, the candidate may not signal their true type leading to a pooling effect as voters are unable to distinguish between high quality and low quality candidates which can lead to adverse selection and may be harmful to high quality candidates. The expectation is that the ANC is able to secure more votes by increasing the goods and services provided to the electorate towards elections which are observed as a measure of competence by the voters due to information asymmetry.

In adverse selection models, there is information asymmetry as incumbents know their competence level which is unknown to the voters so they can signal their competence level through the provision of public goods and services. These models have been instrumental in the literature of PBCs because they assume rationality and strategic behaviour while focusing on manipulation and thus allow for empirical testing (Kouvavas, 2013).

The issue of adverse selection may lead to low voter turn-out creating something similar to a market of lemons in the political space especially when voters are loyal to the ruling party and decide to rather abstain from voting. This can be as a result of a mismatch between campaign promises and service delivery or a mismatch between goods and services provided during voting season and goods and services after elections. Participation by the voting age population of South Africa has overall declined in the past democratic elections from 86.0 per cent in 1994, to 72.0 per cent in 1999, to 58.0 per cent in 2004, rising to 60.0 per cent in 2009, then declining to 57.0 per cent in 2014, and then to 49.0 per cent in 2019 meaning in the 2019 election less than half of eligible voters cast their vote (Schulz-Herzenberg, 2020).

Related to adverse selection, in moral hazard models, both politicians and voters cannot observe the government's level of ability. The government will therefore manipulate the pre-election budget balance by issuing debt to increase the provision of public goods. The debt increase will depend on how many voters can observe the real debt thus in moral hazard models, the pre-election manipulation is derived from the information the voter has (Kouvavas, 2013).

4.3. Fiscal Transparency

There are several other factors that constrain or enable the engagement of PBCs in line with information asymmetries including fiscal transparency which is:

“openness toward the public at large about government structure and functions, fiscal policy intentions, public sector accounts, and projections…so that the electorate and financial markets can accurately assess the government’s financial position and the true costs and benefits of government activities, including their present and future economic and social implications.” (Kopits and Craig, 1998, p.1)

A high level of fiscal transparency constrains incumbents from running a budget deficit during election years to ramp up the provision of public goods as the electorate is aware of such movements and will likely not vote for the incumbent that increases the deficit given the anticipated post-election fiscal contraction. Empirical evidence shows that “where institutions are less transparent, the cycle in fiscal balance appears, while [there is] no such election-related movement in higher-transparency countries” (Alt and Lassen 2006, p. 3).

However, high transparency countries can still exhibit cycles as the incumbent has at their disposal the option to formulate alternative fiscal strategies including altering the composition of expenditures or delaying contractionary policies such as tax increases and budget cuts (Schneider, 2010). In mature democracies for example, where spending on public goods reflects the incumbent’s preference rather than competence, the incumbent’s task is not to run a budget deficit but to ensure the composition of the budget aligns with the voters’ spending priorities during election years.

South Africa has a high fiscal transparency score of 87 (out of 100); suggesting “the country is publishing sufficient material to support informed public debate on the budget” (OBI, 2019, p.1) However, a high fiscal transparency which is not coupled by high participation in budgetary processes can result in a country with high fiscal transparency exhibiting PBCs. This is because the majority of the population do not actively access the available information and thus government can take advantage of the ignorance of the voters and manipulate certain fiscal instruments. This is the case in South Africa as we will see an increase in deficit spending and a reduction in tax revenue during election years, despite the country having one of the highest fiscal transparency index in the world.

4.4. Media Bias

Media coverage plays a huge role in the dissemination of information which determines the size of the PBC and the ruling party's ability to spread propaganda. Empirical evidence based on a panel dataset of 70 countries between 1975 and 2010 shows that the most important conditional factor for PBCs is the amount of information voters have about fiscal policy with a particular emphasis on media freedom (Veiga and Efthyvoulou, 2018). Uninformed voters are unable to form rational expectations as they are likely to fall for government propaganda thereby lowering their deficit perception. The ruling party thus has an incumbency advantage in this regard.

The South African Broadcasting Corporation (SABC) which is South Africa's public broadcaster has over the years been accused of not adequately safeguarding democracy given its influential role in shaping political debate. Orgeret (2008) argues "the broadcaster has developed in the direction of being a voice much closer to the political powers than at any earlier stage since the end of apartheid" (Orgeret, 2008, p. 629). The media attention received by the ANC presents a campaign discount for the party as the greater name recognition enables the party to become more positively evaluated thereby increasing re-election chances (Abramowitz, 1980).

5. Types of Political Budget Cycles

The theory on PBCs suggests that they are context conditional; that is, "the dependence of the magnitude, regularity, and content of PBCs on international and domestic politico-economic and institutional conditions" (Veiga and Efthyvoulou, 2018, p.4). PBCs are identified in new democracies (Brender and Drazen, 2005; Shahor 2013), proportional-parliamentary systems (Persson and Tabellini, 2003) and developing countries (Shi and Svensson 2002; 2006), all of which apply to South Africa.

5.1. New Democracy PBC

Empirical evidence shows that PBCs are a new democracies phenomenon as new democracies are usually characterised by weak institutional structures which would otherwise constrain governments from deficit spending (Brender and Drazen 2005; Shahor 2013). Unlike mature democracies, newer democracies also tend to have low levels of information dissemination and media freedom which enables fiscal manipulations. Time also comes to play as voters in new democracies might not yet be familiar with the pre-election boom and post-election deterioration cycles during election years thus incumbents can still exploit PBCs. As the democracy matures the PBC is dampened. Shahor (2013) provides evidence of this phenomenon using Israeli fiscal data between the 1980s and 2000s which shows that the active PBC in Israel in the 1980s dampened in the 1990s and disappeared in the 2000s.

5.2. *Constitution-dependent PBC*

Recent empirical research suggests the existence of constitution-dependent PBCs. A study of 60 countries from 1960 to 1998 by Persson and Tabellini (2003) shows two types of PBCs depending on the electoral rules and form of government. The first type of PBC is a delay in implementing contractionary policies during election years and this is found in presidential-majoritarian systems where borrowing is constrained thus political revenue cycles are more likely. The second type of PBC is found in proportional-parliamentary systems, as is the case of South Africa, where election years exhibit a more pronounced increase in welfare spending as percentage of GDP.

5.3. Developing Country PBC

PBCs have also been identified by Shi and Svensson (2002; 2006) in developing countries. These PBCs are driven by the ability to extract rents and the ability to stand for re-election. According to Shi and Svensson (2002), “the more private benefits politicians gain when in power, the higher the return of re-election, and the stronger the incentives to influence the voters’ perceptions by expansionary policies prior to the election” (Shi and Svensson, 2002, p.7). Developing countries may have weak institutional constraints thus are susceptible to larger PBCs as there is a positive corelation between corruption and the magnitude of PBCs.

5.4. Subnational PBC

Distributive politics literature analyses how preferred subnational districts receive more transfers from the incumbent in a bid to secure votes (Cox and McCubbins, 1986; Lindbeck and Weibull, 1987). Garofalo et al. (2019) study the impact of distributive politics on PBCs and find that districts in which the incumbent political party dominates receive larger discretional transfers in election years. In their model voters are rational and forward looking such that they tend to favour the ruling party as they expect to accrue membership advantages in the form of a higher provision of public goods as a result of larger federal transfers instead of higher taxes. In the same way, the electorate will vote for candidates aligned with the ruling party during local government elections if and only if they expect the ruling party to win in the national elections in anticipation of higher transfers otherwise they will vote for the opposition.

6. Empirical Strategy

6.1. Data Sources

This study considers a data set consisting of yearly observations of the South African national and provincial budgets from 2001 to 2019. The data sources include the South African Reserve Bank (SARB) where GDP per capita is obtained as it is considered reliable given it is based on the SARB's own calculation and that of Statistics South Africa. The data for fiscal indicators is obtained from the National Treasury budget data for the period 2001 to 2019 as the National Treasury is considered the most reliable source in this regard given it manages the national and provincial government finances of South Africa.

The fiscal variables investigated in this paper on the national level are the budget balance, social services, equitable share, total revenue and tax revenue. On the provincial level the paper investigates movements in the equitable share and the conditional grants. Data on the voter share is taken from the Independent Electoral Commission of South Africa, a body created by the Constitution of South Africa to manage elections at all levels of government. The control variables which are the demographic data are obtained from the World Bank publication and include population statistics for the years 2001 to 2019.

6.2.Fiscal Variables on the National Level

a) Budget Balance

The budget balance is the country's fiscal balance as a percentage of GDP[1]. This variable can either be a deficit (expenses exceed revenue) or a surplus (revenue exceeds expenses). The increase in the provision of goods and services to signal competence tends to worsen the budget balance in an election year given taxes are usually kept constant.

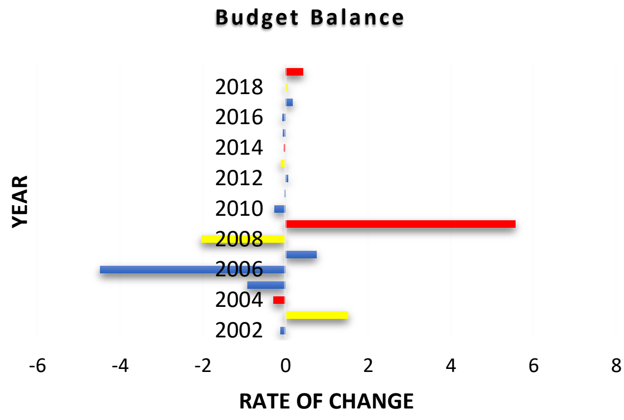
The size of the South African budget balance during election years is not predictable as on the one hand the country is a developing, fairly new democracy with a proportional-parliamentary system where the elections are predetermined to hold during the first quarter of the fiscal year thus susceptible to PBCs. On the other hand, fiscal transparency is high per the Open Budget Index, therefore we expect voters to be able to identify the opportunistic dead-weight loss of a deteriorating budget balance during election years and thus punish the ruling party if it runs a larger deficit during that period.

Given the increase in pre-electoral expenditures is usually directed towards current consumption which increases voter utility, more than capital expenditure in the short run, and tends to be immediately visible, running a larger deficit will have negative implications for economic growth in an already struggling economy which requires a capital expenditure increase (Rogoff, 1990).

Figure 1 shows the rate of change of the budget balance for the period 2002 to 2019. A PBC is identified in the 2004 and 2009 election years as shown by the steep rates of change in 2003 and 2009 which had the largest deficits followed by an improvement.

[1] All variables are measured as a GDP percentage in order to account for inflation as well as filter out size effects.

Figure 1 Rate of Change of the Budget Balance as a percentage of GDP



Source: National Treasury, 2021.
Red = election year
Yellow = pre-election year

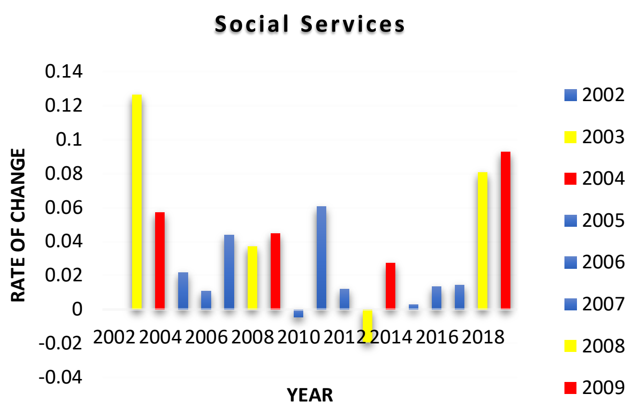
b) Social Services

The social services variable includes education, health care, local development, infrastructure and social protection expenditures in the national budget. Social services play a huge role in alleviating poverty and reducing inequality relative to market income in the most economically unequal country in the world (0.63 Gini coefficient), with the highest aggregate unemployment (34.9 per cent) and youth unemployment (66.5 per cent) as of the third quarter of 2021, and high levels of poverty (55.5 per cent of the population lived below the lower-bound poverty line in 2015) (StatsSA, 2021).

The literature on PBCs provides evidence of an increase in welfare spending in election years which we expect to increase the votes of the ANC on the national level given an improvement in people's living conditions should make them favour the ruling party. This is in line with the findings of Shi and Svensson (2002).

The social services graph, Figure 2, suggests the existence of PBCs in the 2004 and 2019 elections where significant increases were recorded in 2003, 2018 and 2019.

Figure 2 Rate of Change of Social Services as a percentage of GDP



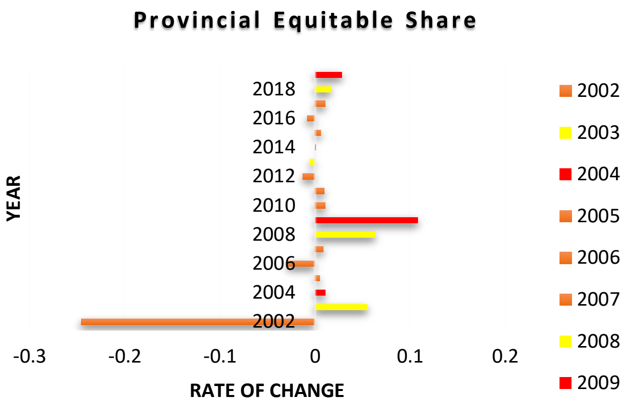
Source: National Treasury, 2021.
Red = election year
Yellow = pre-election year

c) *Provincial Equitable Share*

The Provincial Equitable Share is expressed as a percentage of GDP. It is an equitable share formula with the purpose of equitably distributing revenue raised nationally to provincial governments in terms of section 227(1) of the Constitution of the Republic of South Africa (Act 108 of 1996). This transfer from the national government is to fund provincial governments which do not raise their own tax revenue but bear responsibilities for road infrastructure and the provision of education and health services. It is the primary source of funding for provincial governments accounting for more than 80 per cent of transfers to provinces (National, Treasury 2016). There is also an element of redistribution to ensure that poorer and/or more sparsely populated provinces receive funding (National Treasury, 2016).

The equitable share formula consists of six components which are adjusted for changes in demographics in each province as well as relative demand. These six components are education, health, basic, poverty, economic and institutional with the education (48.0 per cent) and health (27.0 per cent) components carrying the highest weight (National Treasury, 2016). The equitable share is predetermined by the Division of Revenue Act and is mandated in Section 214(1) of the Constitution thus the incumbent should be constrained in using this tool to mobilise voter support. However, as Figure 3, shows, there are significant fluctuations in the rate of change of the equitable share during the 2004, 2009 and 2019 elections. This brings into question whether or not the ANC is truly constrained in the use of the equitable share. Perhaps because the equitable share can be adjusted based on demand and demographics, there might be a manipulation of this data during election years which would then increase allocation without necessarily changing the formula.

Figure 3 Rate of Change of Provincial Equitable Share as a Percentage of GDP



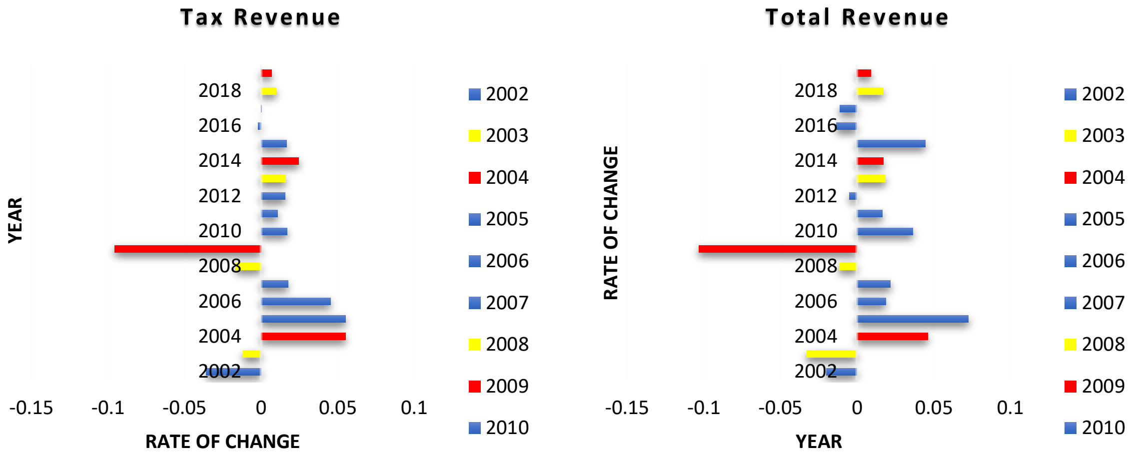
Source: National Treasury, 2021.
Red = election year
Yellow = pre-election year

d) *Total Revenue and Tax Revenue*

PBCs have been most prevalent in newer democracies and developing countries mainly because of lower information dissemination and fiscal transparency. Nonetheless, Persson and Tabellini (2003) identified a cycle that can be found in both low and high transparency countries using a data set of 60 countries between 1960 and 1998. The difference however between low and high fiscal transparency countries is that while adjustments are made in high fiscal transparency countries post-elections, such adjustments do not occur in countries with a low fiscal transparency (Alt and Lassen, 2006). The cycle is called a political revenue cycle (PRC) and is characterised by a decrease in government total and tax revenues as a percentage of GDP due to tax breaks and readjustment of tax brackets during election years while public debt increases due to increases in public goods expenditures.

As illustrated in Figure 4, a PRC is identified in the first two elections for the period under study; the 2004 and 2009 elections with the most significant peak being in the 2009 elections.

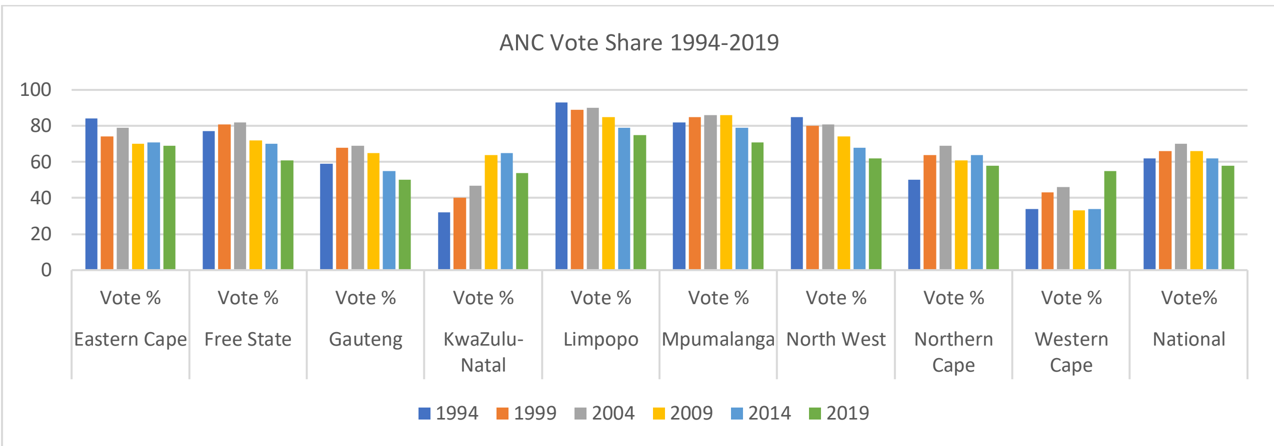
Figure 4 Rate of Change of Tax Revenue and Total Revenue as a Percentage Of GDP



Source: National Treasury, 2021.
Red = election year
Yellow = pre-election year

7. Transfers from Central Government to Provinces

Figure 5 ANC Vote Share 1994-2019



Source: IEC, 2021.

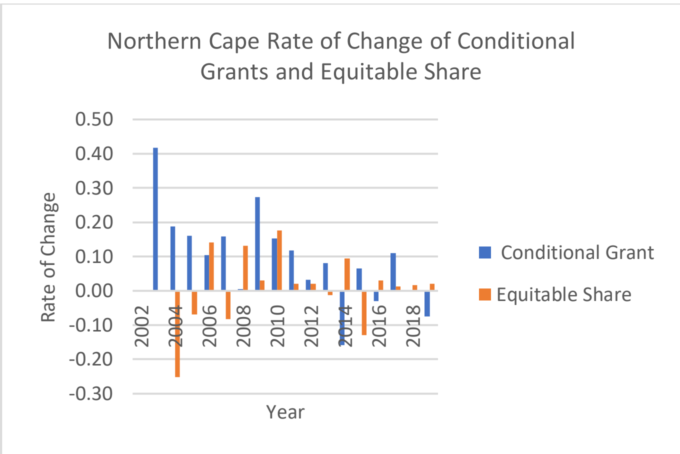
The provincial vote share, as illustrated by Figure 5, depicts a trend similar to the ANCs vote share on the national level. The share increased in 1999 and 2004 but gradually declined in all provinces with the exception of the Western Cape province in the 2019 election, where ANCs vote share exceeded 50.0 per cent for the first time since South Africa became a democratic country. The electoral margin is narrowing and Boylan (2008) as well as Aidt and Veiga (2011) provide evidence that in such a situation there is a "close election bias" that is, "government manipulations increase if the election is closely contested" (Bohn, 2019, p.44).

There are two types of transfers in South Africa namely the equitable share and the conditional grants. The conditional grants which are non-formula based are said to be the ideal government transfer to secure votes in provinces given they are at the discretion of the ruling party unlike the equitable share (Garofalo et al., 2019). There are nine provinces in South Africa which will be investigated for the existence of cycles in transfers and to ascertain whether provinces in which the ANC faces greater competition (KZN and Western Cape) receive higher or lower transfers in election years.

a) *Northern Cape*

The conditional grants allocation as a percentage of the Northern Cape GDP has been on the decline although a significant spike can be seen in the 2009 elections and a year prior to the 2004 elections suggesting the existence of a political budget cycle in the first two elections in the data set. On average, the Northern Cape receives the second highest transfers in conditional grants among the provinces during election years. There are no observable trends around elections in the equitable share. Competition is increasing for the ruling party which now has greater support than in 1994 where it only garnered 50.0 per cent of the votes. The biggest competitor in the province is the DA whose support has been on a steady increase from 11.0 per cent in the 2004 elections to 26.0 per cent in the 2019 elections.

Figure 6 Northern Cape Rate of Change of Conditional Grant and Equitable Share as a Percentage of GDP

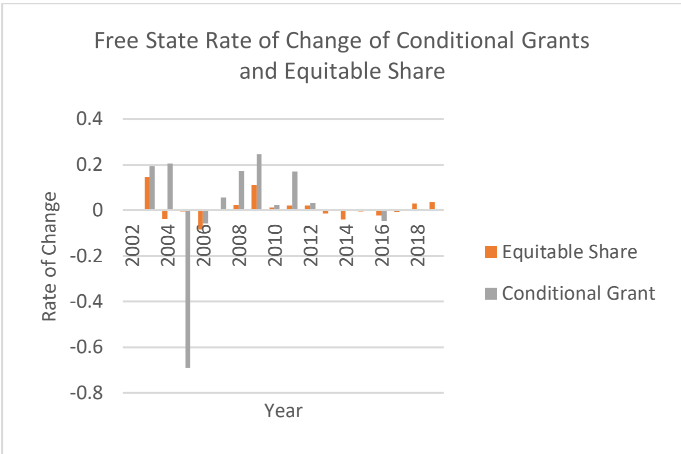


Source: National Treasury, 2021

b) Free State

There is evidence of a spike in the first two elections in the Free State in both the conditional grants allocation and the equitable share as a percentage of the province's GDP which followed by a dip after elections. While this increase in revenue allocation might have resulted in an increase in votes in 2004 as illustrated in Figure 5, support has been on the decline from 82.0 per cent in 2004 to 61.0 per cent in 2019. On average, the Free State received the highest transfer in conditional grants in the past elections compared to other provinces.

Figure 7 Free State Rate of Change of Conditional Grants and Equitable Share as a Percentage of GDP

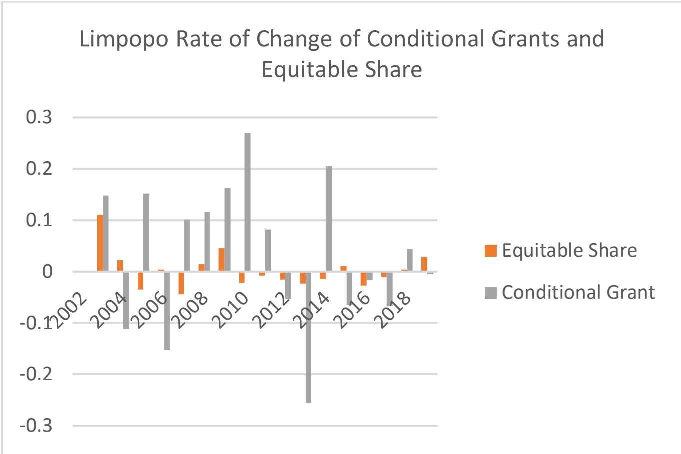


Source: National Treasury, 2021.

c) Limpopo

Figure 5 shows a very minimal decline in support for the ANC since 1994. It is the province where the ANC still enjoys an outright majority of 75.0 per cent as of the 2019 election. There seems to be a cycle in the 2014 elections which may have been triggered by a 5.0 per cent decrease in votes from 90.0 per cent in 2004 to 85.0 per cent in 2009. The conditional grants increased in the 2018 while the equitable share increased significantly in 2009 and 2019.

Figure 8 Limpopo Rate of Change of Conditional Grants and Equitable Share as a Percentage of GDP

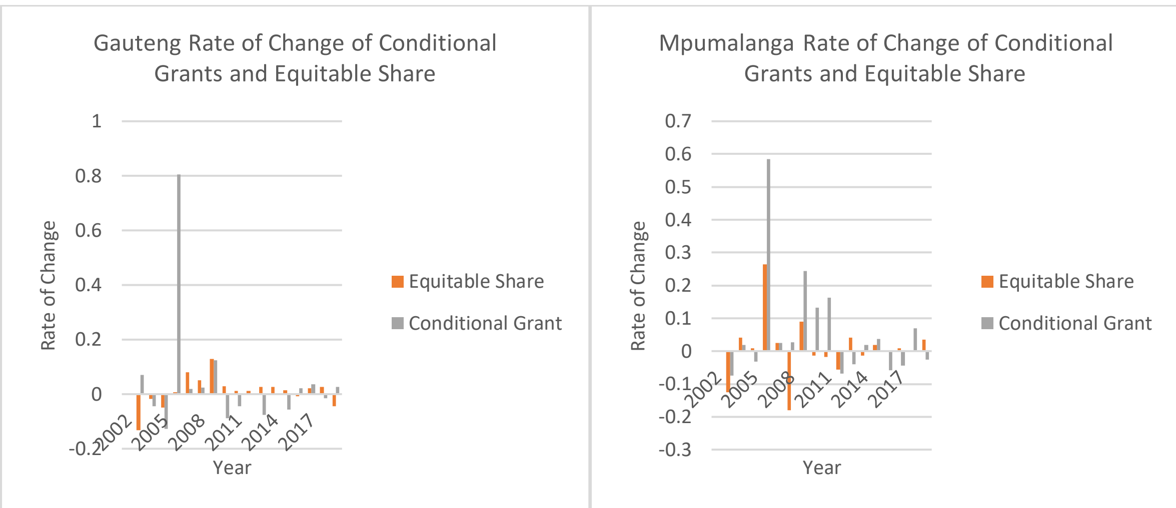


Source: National Treasury, 2021.

d) *Gauteng and Mpumalanga*

Gauteng and Mpumalanga show a spike in both the conditional grants and the equitable share in 2009 which is preceded by a dip. The two provinces also received the lowest conditional grants on average during the past elections. Competition is greater in Gauteng than any other province although there is no evidence of buying of votes using revenue allocation. This could be because the province generates much of its revenue. As illustrated in Figure 5, the ANC had a 50.0 per cent voter share while the DA had 27.0 per cent and the EFF had 15.0 per cent in the 2019 elections.

Figure 9 Gauteng and Mpumalanga Rate of Change of Conditional Grants and Equitable Share as a Percentage of GDP



Source: National Treasury, 2021.

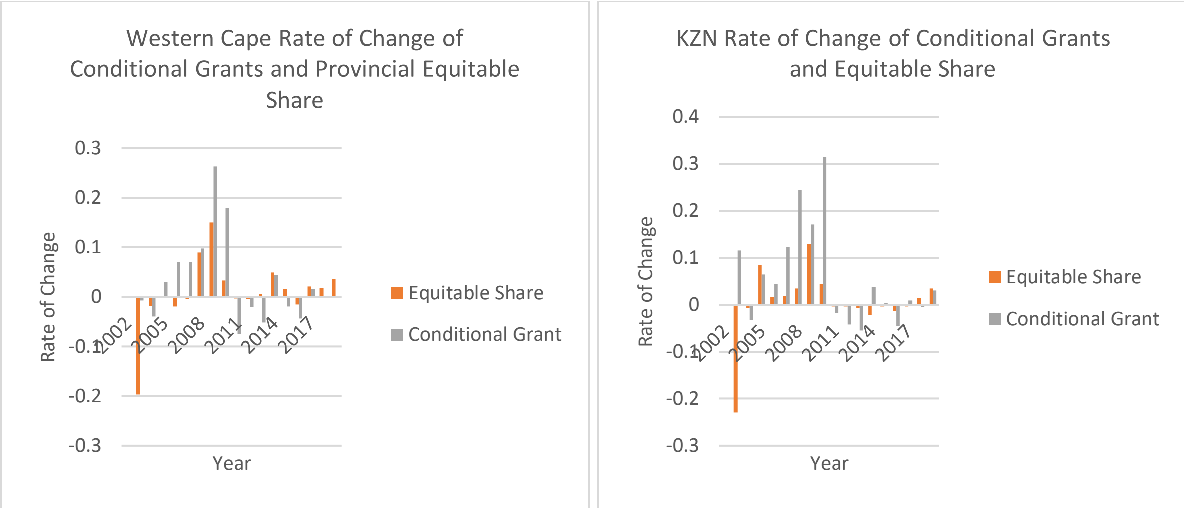
e) Western Cape and KwaZulu-Natal

The Western Cape and KwaZulu-Natal are the two provinces in which the ANC has faced the greatest competition since 1994. The literature provides two opposing results were in some instances, competitive regions receive higher transfers during election years (Kroth 2012) while other empirical studies show that regions that do not favour ruling parties receive lower transfers (Garofalo et al., 2019).

In Western Cape, a significant spike can be seen in the 2009 and 2014 election years in both the equitable share and the conditional grants. In 2019 there is also a significant rise in the equitable share compared to the previous years after the 2014 election. However, on average, the Western Cape Province receives the third lowest conditional grants as a percentage of GDP during election years. This could be because the province had until the 2019 election been dominated by the DA such that the ruling party was not generous in distributing non-formula based transfers to the province. Trust in the ANC improved in the 2019 election as the party went from a 34.0 per cent voter share in 1994 to 55.0 per cent. The DA lost the majority share for the first time since the 2004 election.

In KwaZulu-Natal there is a notable increase in the conditional grants in the 2004, 2014 and 2019 elections. The increase in the conditional grants in 2004 is preceded by an increase in the ANC's vote share from 47.0 per cent in 2004 to 64.0 per cent in 2009 and 65.0 per cent in 2014. This increase in votes for the ANC in the 2009 and 2014 elections can in part be attributed to former President Jacob Zuma's rise to power as he comes from KwaZulu-Natal. In 2019 when President Cyril Ramaphosa was running for presidency the votes declined to 54.0 per cent as illustrated in Figure 5. On average, Kwa-Zulu Natal received the fourth lowest conditional grants during election years.

Figure 10 Western Cape Rate of Change of Conditional Grants and Equitable Share as a Percentage of GDP

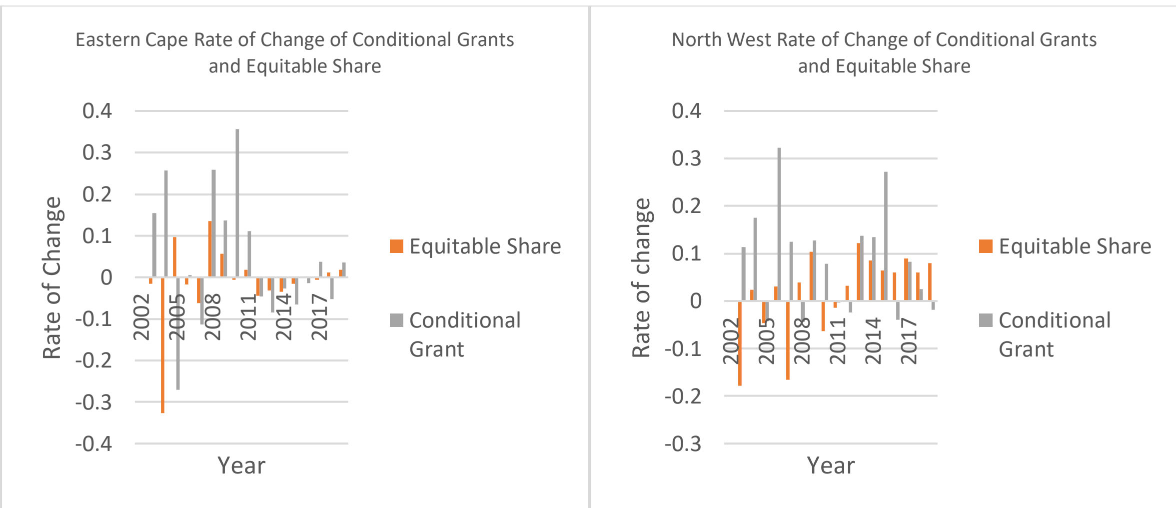


Source: National Treasury, 2021.

f) Eastern Cape and North West

The North West and Eastern Cape provinces do not show signs of a PBC as revenue allocations seem to generally fluctuate over the years with no significant spikes in the election years. Support for the ANC has however in both provinces declined steeply. In 1994 ANC had a voter share of over 80.0 per cent but as of 2019 the party now has a 69.0 per cent and 62.0 per cent voter share for the Eastern Cape and North West respectively. On average however, the Eastern Cape province received the third highest conditional grants during the election years as a percentage of GDP.

Figure 11 Eastern Cape and North West Rate of Change of Conditional Grants and Equitable Share as a Percentage of GDP



Source: National Treasury, 2021.

8. National Model

The paper will investigate whether the ANC is using its incumbency advantage to induce PBCs to retain power by testing the following hypothesis:

H_0: There is evidence of political budget cycles in South Africa on the national level during election years.

The study covers four elections held in 2004, 2009, 2014 and 2019. Given elections hold during the first quarter of the fiscal year which spans from the 1st of April to the 31st of March the next year, the election years to be investigated for PBCs are the year prior to an election and the year of the election because the budget allocations occurs before the election thus people can vote for the ANC based on their expectation of an improvement in welfare. Per the political budget cycles literature I use a single lag for my dependent variable to run the regressions due to fiscal inertia. Information for Y_{z-1} before an election is relevant for the election period t.
The time series model is:

$$Y_t = \beta_0 + \beta_{z-1} Y_{z-1} + \sum_i \beta_i X_{i,t} + \sigma * ELCT + \sigma_{+1} ELCT_{+1} \tag{7}$$

The regression model is first used by Shahor (2013). The model is adjusted to include the unemployment rate as an additional control variable as the high unemployment rate in South Africa increases social services expenditure thereby decreasing revenue and potentially increasing the budget deficit. As shown, PBCs occur in three main areas, which are the budget balance, welfare expenditure and provincial grants (Garofalo et al., 2019; Shi and Svensson, 2002; Veiga and Efthyvoulou, 2018). I will therefore look for evidence in these areas. A separate regression is run for each policy variable on the national level to investigate changes to the variable in the election years. The policy variable Y is (i) budget balance as a percentage of GDP, (ii) social services as a percentage of GDP, (iii) provincial equitable share as a percentage of GDP, (iv) tax revenue as a percentage of GDP, and (v) total revenue as a percentage of GDP.

ELCT is a dummy variable with the value 1 in the pre-election years (2003, 2008, 2013, 2018) and the value 0 in the other years. Separate dummy variables are established for each year.

ELCT_{+1} is a dummy variable with the value 1 for the year in which elections hold (2004, 2009, 2014, 2019) the value 0 in the other years. Based on the literature, an increase in a fiscal variable during election years will result in a reduction in the following year. I therefore expect the ELCT coefficients to be positive if PBCs exist in the election years and the ELCT_{+1} coefficients of the variables are expected to be lower post-elections. A PBC exists if the ELCT coefficient is 0 and the ELCT_{+1} coefficient is negative as the government might have delayed contractionary policies to avoid losing votes during elections.

Y_{z-1} is the policy variable with one year lag. $\mathrm{X}_{i,t}$ is a vector of control variables with i elements. For this research the control variables are (i) GDP per capita and (ii) the unemployment rate and (iii) the dependency ratio. I have included GDP per capita to control for South Africa's level of development at the national level as it influences government expenditure in the fiscal variables under investigation.

There is a weakness in the data as the sample size is small with a total of 19 observations. However, several tests are run to guard against spurious regressions. The model used might due to lags result in a serial correlation problem which violates the ordinary least squares assumption of no correlation between error terms and may erroneously render the coefficients of the lagged fiscal variables insignificant. The Breusch-Godfrey test is used to test for serial correlation and it was not detected. The Breusch-Pagan is used to confirm there is no heteroskedasticity. The Augmented Dickey-Fuller unit root test is used to confirm stationarity and GDP is differenced to ensure stationarity.

8.1. Descriptive Statistics

Table 1 Descriptive Summary Statistics National Government Revenue and Expenditures

Variable	Obs	Mean	Std. Dev.	Min	Max
Year	19	2010		2001	2019
Provincial Equitable Share	19	0.089	0.007	0.075	0.099
Budget Balance	19	-0.031	0.023	-0.067	0.009
Transfers and Subsidies	19	0.125	0.017	0.093	0.143
Compensation of Employees	19	0.030	0.003	0.026	0.034
Tax Revenue	19	0.248	0.013	0.223	0.263
Total Revenue	19	0.246	0.012	0.222	0.261
Goods and Services	19	0.015	0.000	0.014	0.016
Debt	19	0.030	0.006	0.022	0.044
Social Services	19	0.056	0.011	0.020	0.076
Dependency Ratio	19	0.541	0.026	0.522	0.608
Unemployment Rate	19	0.270	0.030	0.224	0.332

Sources: The South African National Treasury, The South African Reserve Bank, Statistics South Africa and The World Bank

The summary statistics as recorded in Table 1, show a significant increase in government spending in the election years. This suggests that political budget cycles are induced in election years. The standard deviation of all fiscal variables as a percentage of GDP is low showing that data points are close to the mean value and not spread over a wide range for the years 2001 to 2019 which supports the law of fiscal inertia.

The most notable increments as shown by the difference between the maximum and minimum values are those of the budget balance, transfers and subsidies and social protection; all as a percentage of GDP implying significantly large increases in those instruments over the years. Transfers and subsidies as well as social protection are budget instruments of choice when inducing PBCs as voters support incumbents that improve their standard of living thus an increment in these instruments in the absence of an increase in revenue will lead to a larger budget deficit. The mean budget balance on the national level is negative reflecting an overall budget deficit. The budget balance was however positive in the years 2006 and 2007 on the national level and these years are not election years thus manipulation is not expected.

Social services as well as transfers and subsidies exhibit tremendous growth in spending on welfare and transfers for the years 2001 to 2019. While all fiscal variables are normally distributed, social services are positively skewed further suggesting extremes in that fiscal instrument. The high kurtosis value of social services shows the existence of outliers in the data set alluding to periods of peaks or dips in spending and the peaks are expected to exist in election years. The other fiscal variables under investigation have an acceptable kurtosis value of -2,2.

The mean value of the dependency ratio is 0.54 showing that over half of the population is either dependent on some form of social protection or a working family member. The situation is further aggravated by the high unemployment rate which is 34.9 per cent as of the third quarter of 2021 (StatsSA, 2021). This paper will investigate further if these increases in fiscal variables are as a result of PBCs on the national government level in South Africa.

9. Regression Results

9.1.Budget Balance

Information asymmetry between the voter and incumbent party creates a signal extraction problem. Given South Africa is a fairly new democracy and participation in budget processes by the electorate is low, the ANC has an incentive to worsen the budget deficit during election years in order to signal competence as the electorate will not be able to separate the effects of competence and deficits on the provision of public goods (Alt and Lassen, 2006). Public goods tend to be mainly financed by tax revenue and the literature provides evidence that there is a fall in revenue during election years thus an increase in spending on public goods will lead to expenses exceeding revenue resulting in larger deficits (Shi and Svensson, 2006).

The regressions are run in two phases. The first phase as recorded in the first column of Table 2. includes dummy variables of the pre-election years (2003, 2008, 2013, 2018). While in the second phase as recorded in the second column of Table 2., the regressions are run for the election years (2004, 2009, 2014, 2019).

The results suggest a PBC existed in the 2004 and 2009 elections. As the table shows, the deterioration of the budget balance was worse during these elections as shown by the negative coefficients of the significant dummy variables for the pre-election years 2003 and 2008 as well as the election year 2009. The significance is shown by a P-value of less than 10 per cent.

The results support findings by Shahor (2013) that the more mature democracies become, the less likely incumbent governments will induce PBCs as there is no evidence of a cycle in the budget balance in the last two elections (2014 and 2019) in South Africa.

Table 2. Regression results where the dependent variable is the budget balance as a percentage of GDP

Dependent Variable	**Budget balance as a percentage of GDP (controlling GDP per capita) for pre-election years**		**Budget balance as a percentage of GDP (controlling GDP per capita) for election years**	
	Coefficient	P-value	Coefficient	P-value
Budget Balance_{-1}	0.849***	0.000	0.861***	0.000
GDP Per Capita	-0.302*	0.090	-0.258**	0.015
2003	-0.025**	0.014		
2004			-0.003	0.718
2008	-0.020**	0.051		
2009			-0.055***	0.000
2013	0.002	0.751		
2014			-0.000	0.954
2018	-0.000	0.980		
2019			0.004	0.614
Adjusted R-squared	0.90		0.93	
Durbin-Watson stat	1.59		1.84	

*Significant at the 10 percent level; **significant at the 5 percent level; ***significant at the 1 percent level.

9.2. Social Services

The social security component of social services is expected to drive the PBC during election years as the ANC seeks to improve the welfare of voters during election years in order to increase re-election chances. The increase in spending on social services need not be funded by an increase in the budget deficit, the government can simply redirect funds from other spending programmes to social services expenditures.

The regression is run in two phases. The first phase as shown in the first column of Table 3. includes pre-election year dummy variables (ELCT) for 2003, 2008, 2013 and 2018 while the second phase as shown in the second column of Table 3. includes election year dummy variables (ELCT_{+1}) for 2004, 2009, 2014 and 2019.

The results suggest a PBC may exist in the 2019 election where there is an increase in spending on social services of approximately 11.9 per cent at a 5 per cent significance level.

Table 3. Regression results where the dependent variable is social services as a percentage of GDP

Dependent Variable	**Social Services as a percentage of GDP (controlling GDP per capita, Unemployment Rate and Dependency Ratio) for pre-election years**		**Social Services as a percentage of GDP (controlling GDP per capita, Unemployment Rate and Dependency Ratio) for election years**	
	Coefficient	P-value	Coefficient	P-value
Social Services$_{-1}$	0.074	0.547	0.058	0.398
GDP Per Capita	0.241***	0.007	0.24***	0.000
Unemployment Rate	0.64	0.802	-0.249	0.358
Dependency Ratio	1.055	0.635	2.068	0.720
2003	-0.01	0.987		
2004			0.011	0.723
2008	0.023	0.707		
2009			0.019	0.515
2013	-0.018	0.687		
2014			-0.002	0.940
2018	0.019	0.684		
2019			0.119***	0.004
Adjusted R-squared	0.922		0.97	
Durbin-Watson stat	0.99		1.76	

*Significant at the 10 percent level; **significant at the 5 percent level; ***significant at the 1 percent level.

9.3. *Provincial Equitable Share*

The ANCs ability to manipulate the unconditional equitable share formula during election years as set out in the Constitution is constrained. However, regressions are run in two phases, first with pre-election dummy variables and then with election year dummy variables to ascertain if there are any significant movements during election years as the provincial equitable share rate of change graph suggested such movements exist.

The pre-election dummy variables in Table 4. suggest there are no cycles in the pre-election years. However, results in the second column of Table 4. with the election years dummy variables show that a PBC existed in the 2009 election.

The coefficient for 2009 which suggests a 7.2 per cent increase in the provincial equitable share is statistically significant at the 10 per cent level. This suggests that although the formula is not changed during election years, the allocation towards the equitable share can be manipulated by feigning an increase in relative demand or altering demographic data.

Table 4. Regression results where the dependent variable is provincial equitable share as a percentage of GDP

Dependent Variable	**Provincial Equitable Share (controlling GDP per capita) for pre-Election Years**		**Provincial Equitable Share (controlling GDP per capita) for Election Years**	
	Coefficient	P-value	Coefficient	P-value
Provincial Equitable Share_{-1}	0.293***	0.004	0.28***	0.029
GDP Per Capita	0.116***	0.000	0.106***	0.000
2003	0.07	0.143		
2004			0.025	0.520
2008	-0.002	0.961		
2009			0.072*	0.072
2013	-0.003	0.933		
2014			-0.002	0.964
2018	-0.017	0.681		
2019			0.012	0.760
Adjusted R-squared	0.83		0.85	
Durbin-Watson stat	0.98		1.48	

*Significant at the 10 percent level; **significant at the 5 percent level; ***significant at the 1 percent level.

9.4.Total Revenue and Tax Revenue

Persson and Tabellini (2003) provide empirical evidence of the existence of revenue cycles during election years whereby revenue decreases significantly as a result of tax cuts. This paper investigates the existence of PRCs in both tax revenues and total revenue in two phases. First with the pre-election year dummy variables and then with election dummy variables.

The results as recorded in Table 5. and Table 6. Suggest a PRC existed in total revenue and tax respectively in the 2009 election. Tax revenue declined on average by 10 per cent at the 5 per cent significance level recorded by the P-value supporting the findings of Persson and Tabellini (2003) that the decrease in revenues are mainly driven by a decrease in taxes as total revenue declined by approximately 11 per cent during the same period at a 5 per cent significance level.

Table 5. Regression results where the dependent variable is total revenue as a percentage of GDP.

Dependent Variable	**Total Revenue (controlling GDP per capita) for pre-Election Years**		**Total Revenue (controlling GDP per capita) for Election Years**	
	Coefficient	P-value	Coefficient	P-value
Total Revenue_{-1}	0.385	0.179	0.71***	0.005
GDP Per Capita	0.025	0.260	0.021	0.172
2003	-0.054	0.231		
2004			0.022	0.512
2008	0.018	0.678		
2009			-0.107***	0.004
2013	-0.008	0.837		
2014			-0.002	0.934
2018	0.016	0.709		
2019			-0.001	0.960
Adjusted R-squared	0.46		0.71	
Durbin-Watson stat	1.40		1.44	

*Significant at the 10 percent level; **significant at the 5 percent level; ***significant at the 1 percent level.

Table 6. Regression results where the dependent variable is the tax revenue as a percentage of GDP

Dependent Variable	**Tax Revenue (controlling GDP per capita) for pre-Election Years**		**Tax Revenue (controlling GDP per capita) for Election Years**	
	Coefficient	P-value	Coefficient	P-value
Tax Revenue_{-1}	0.483*	0.094	0.866***	0.000
GDP Per Capita	0.025	0.256	0.015*	0.260
2003	-0.039	0.377		
2004			0.042	0.159
2008	0.013	0.775		
2009			-0.104***	0.002
2013	-0.005	0.892		
2014			0.009	0.729
2018	0.008	0.828		
2019			-0.007	0.798
Adjusted R-squared	0.54		0.81	
Durbin-Watson stat	1.02		0.82	

*Significant at the 10 percent level; **significant at the 5 percent level; ***significant at the 1 percent level.

10.Estimation Results in the Context of Election Years

10.1. *2004 Elections*

The regression results in Table 2. show that a PBC existed in the budget balance in 2003 where the budget deficit widened by approximately 3 per cent. The increase in the deficit was largely driven by increased spending on public goods and services, conditional grants allocations as well as transfers and subsidies to provinces and municipalities.

There was increased allocation for investment in municipal infrastructure and basic services (National Treasury, 2004). The spending was directed towards poorer municipalities to improve access to basic services outlined in the Bill of Rights by increasing their capacity to "ensure free provision of essential services such as water, electricity, sanitation and refuse removal" (Manuel 2004). The infrastructure investment drive was directed towards 13 rural and 8 urban localities which were included in the Rural Development Strategy and Urban Renewal Plan (National Treasury, 2004).

The budget deficit was also a result of further investments in infrastructure through the Expanded Public Works Programme (EPWP) which was forecast to create one million temporary jobs within five years allowing employees of the programme to gain skills for future employment. The EPWP per the Finance Minister, Trevor Manuel, would deliver "certain types of infrastructure projects and other services using people rather than using machines" (Manuel, 2004).

Additional movements in expenditure during the 2004 election which could have worsened the budget deficit include the increase in funding allocated to the land restitution process whereby individuals who were displaced by the apartheid regime received land and money to atone for economic injustices and alleviate poverty while promoting sustainable land use. The process commenced before 2003 however the allocation was increased in 2003 with the aim of speeding up the process. Given land redistribution is a sensitive issue to the majority of voters in South Africa, this increased allocation during the 2004 election period was neither about justice nor the benevolence of the ANC but rather a clear case of fiscal manipulation to retain votes.

The 2004 election period saw an increase in allocation towards welfare as the age cap for Child Support Grants (CSG) recipients was increased from nine years old to eleven years old. This increased the share of CSG recipients as they now made up over 50.0 per cent of the 4 million total grant recipients (National Treasury, 2004). This supports findings by Shi and Svensson (2006) who provide evidence that PBCs are driven by an increase in welfare spending under a proportional system. Additional funds were allocated for the Department of Social Development to establish an agency which would directly deliver social grants.

Taxes were also cut in 2004 and incomes of less that R30 000 would not be taxed but this did not trigger a political revenue cycle (National Treasury, 2004).

10.2. 2009 Elections

The 2009 election regression results suggest the existence of a larger PBC compared to other election years in the budget balance (5.5 per cent), provincial equitable share (7.2 per cent), tax revenue (10 per cent) and total revenue (11 per cent). There was a 2 per cent increase in the budget deficit in 2008.

The increase in the budget deficit in 2008 can in part be explained by the increase in grant expenditure which increased the share of spending on grants to 10 per cent of total government expenditure. This increase resulted in South Africa ranking amongst the biggest spenders on social grants globally. The increase in welfare expenditure did not however induce a PBC in social services as shown by the regression results although the social services rate of change graph shows 2008 as one of the years with significant increases in social services.

The steepest increase in the budget deficit is recorded in 2009 where the largest declines in tax revenue and total revenue are recorded. The large budget deficit can in part be attributed to a decline in revenues as well as an increase in transfers to provinces. Driving the deficit on the other hand is the 2008 global financial crisis which led to South Africa's economic recession in 2009, affected revenues as several companies closed down or recorded lower profits, impacting corporate tax collections. Personal income tax was also negatively impacted as people lost their jobs and sources of income. Per Statistics South Africa (2019) personal income tax and company income tax were 31 per cent and 30 per cent respectively of the tax pie. Despite firms and individuals being hit hard by the recession, the low tax revenue collections in 2009 also signal ineffective tax collection.

The increase in the budget deficit and spike in the equitable share can also be attributed to investments in infrastructure and protection services which were necessitated by the FIFA World Cup which was hosted by South Africa in 2010. The investment in infrastructure included the building of world-class stadiums as well as improvements in roads, rails and airports.

The year 2009 had the highest surge in corruption in the period under study and also falls in the State Capture years (Transparency International, 2013). State Capture according to Whelan (2016) can be defined as:

> "*fiscal resources being redirected away from public goods provision for the poor or from value-adding economic endowments towards servicing some or other patronage network; and by weakening state capacity through appointing pliable but less than capable people in key positions, especially in finance procurement and political bearers." (Whelan, 2016, p.1)*

This would create cycles in expenditure and revenue as the state tends to be overcharged for outsourced goods and services as contracts are granted in the absence of competitive bidding or as a result of manipulated tenders. This supports the findings of Shi and Svensson (2006) that there is a positive correlation between the size of the PBC and corruption. Corruption in provision of services increases costs incurred by government as often times the services are not delivered by the service provider or the services are substandard such that the government will need to pay another service provider to finish the work.

The outcomes discussed in this section make it difficult to ascertain if the cycles were purely motivated by the need to lobby for votes or if they were a coincidence resulting from the global financial crisis and local recession or the 2010 FIFA World Cup.

10.3. 2014 Elections

There were no political budget cycles recorded in the 2014 election year which supports our prior expectation that PBCs get weaker and cease to exist with time. The government however sought to improve people's economic outcomes during this period by allocating funds to reduce the high unemployment rate in South Africa. In 2013 and 2014 an additional spending item; Employment and Social Security, was included in the national budget. The aim to increase employment opportunities for the people was further supported by the launch of the Employment Tax Incentive in January 2014 which was meant to subsidise the salary of newly recruited 18-29 year olds in order to create an incentive for companies to employ the youth who are the most affected group by the high unemployment rate. These government interventions to address unemployment did not yield the expected results. The unemployment rate worsened in 2014 and has continued to worsen over the years. During the 2014 election taxes on retirement savings were also reduced by 7 per cent to encourage saving (National Treasury, 2014). This did not however result in a PRC.

10.4. 2019 Elections

There is evidence of a PBC during the 2019 election period wherein social services increased by 11.9 per cent as recorded in the regression results. The increase in the allocation to social services can be explained by an increase in social security, free tertiary education, as well as the Youth Employment Services Programme.

Social security drove the increase in social services in 2018 as the allocation towards social security increased by 30 per cent. The increase in social security which includes the old age grant, the foster care grant and the child support grant which recorded the largest increases, was motivated by the VAT increase to 15 per cent which would worsen the living conditions of economically vulnerable people. The Finance Minister, Malusi Gigaba said, “government will increase social grants at a higher rate than before in order to compensate the poor for the increase in VAT” in his budget speech (Gigaba, 2018).

The government initiated the Youth Employment Services programme in 2018 to address high unemployment among the youth who are not employed, in education or training institutions. The programme was envisioned to provide 40 000 jobs for vulnerable youth (National Treasury, 2018). The increase in social services can also be explained by the introduction of fee-free higher education in 2018 for families with an income of less than R350 000. A fund was also allocated to subsidise a zero fee increase for students from families with an income of R350 000 to R600 000 (National Treasury, 2018). While the #FeesMustFall movement began in 2015 the timing of the allocation and rollout suggests a PBC given the youth are eligible voters and failure to implement fee-free higher education would impose a cost on the ANC votes. South Africa’s budget on education now ranks amongst the highest in the developing world.

There was a decrease in tax revenue in the year 2019 which was explained by the Finance Minister’s insights in the Medium Term Budget Policy Statement (MTBPS) as arising from an unexpected increase in Value-Added Tax (VAT) refunds, and lower tax revenue collection (Mboweni, 2019). The year 2019 also saw a slight adjustment upwards of the tax-free threshold for personal income taxes without changing the tax brackets. Greater relief was also given to those in lower income brackets. This did not however lead to a political revenue cycle.

Election years are also characterised by increases in spending on infrastructure and projects tend to also be finalised in those years. Per Shahor (2013, p.714) “prior to elections, governments sometimes promote specific projects in infrastructure and services which can also generate political budget cycles, at least in the public consumption domain.” There was large investment in infrastructure in 2019 as per the Minister approximately “R30 billion was allocated to build new schools and maintain schooling infrastructure (with an) additional R2.8 billion added to the School Infrastructure Backlogs grant to replace pit latrines at over 2 400 schools” (Mboweni, 2019). This however did not result in a political budget cycle in the provincial equitable share as seen from the regression results.

11. Further Discussion

The empirical study shows existence of PBCs in the national budget in the 2004, 2009 and 2019 elections. The ANC was able to use its incumbency advantage in controlling the budgets to induce PBCs in the budget balance, social services, provincial equitable share, tax revenue and total revenue in order to lobby for votes. The PBCs in the 2004 and 2009 elections can be ascribed to asymmetric information as these elections fall within the first three democratic elections of the country such that voters were not yet acquainted with the competence of the ANC and would thus equate an increased provision of goods and services with competence. Voters in the new democracy might have also not identified the cycle in the first few elections, that is, an expansion in the provision of public goods during election years which is followed by a contraction post-elections.

The PBC had ceased to exist in the 2014 election but reappeared in the 2019 election in social services. This is in line with Persson and Tabellini (2003) that PBCs in welfare expenditure tend to persist even in developed and mature democracies. The weakening PBC however supports findings by Brender and Drazen (2005) that PBCs are a new democracy phenomenon such that the more mature the democracy becomes despite persistence of welfare PBCs, the less PBCs are likely to be prevalent. This is because the electorate is better informed and can identify trends in spending and deficits thus will not vote for incumbents who induce cycles given the future consumption foregone as a result of post-election deterioration.

Although fiscal transparency is high in South Africa, there is evidence of cycles in relation to an increase in current expenditure at the expense of capital spending in line with Schneider (2010) who shows electioneering in budget composition is possible in high-transparency countries. The results also align with the literature on political revenue cycles by Alt and Lassen (2006) where the negative revenues in the year before elections are followed by an increase in revenue in the following year. Although the dummy variable coefficients of the non-election years were not significant, they were positive, a characteristic of high transparency countries per Alt and Lassen (2006) where the negative revenues in the year before elections are corrected in the following year.

12. Conclusion

Political budget cycles distort government spending, interfere with national development goals and give the incumbent government an unfair advantage in election years. The paper demonstrates that the ANC used its incumbency advantage to retain power by inducing PBCs on the national level in the 2004, 2009 and 2019 elections. The Provinces also recorded PBCs in all election years mainly driven by the conditional grants as shown by Figure 5 to Figure 11. Spikes were seen in certain provinces in the equitable share during election years; Free State (2004, 2009); Western Cape (2009, 2014); Gauteng and Mpumalanga (2009); KwaZulu-Natal (2009) and Limpopo (2009, 2019). Overall, provinces in which the ANC dominates receive higher conditional grants during election years than provinces in which the ruling party faces greater competition.

As shown, the decline in voter share of the ANC in the provinces as well as the decline in voter support on the national level suggests the use of PBCs to lobby votes during election years has not resulted in an increase in the ANC's vote share. The South African PBC has waned over the years with the remaining PBC being in social services expenditure.

These findings have important policy implications given that for the year 2020/21, gross debt has increased to 80.3 per cent of GDP, the main budget primary deficit sits at 7.5 per cent of GDP, debt-service costs are over the medium term expected to average 20.9 per cent of gross tax revenue and South Africa currently has the highest unemployment rate in the world at 34.9 per cent as of the third quarter of 2021 which reflects a narrowing tax base (National Treasury, 2021). Although PBCs have decreased in the recent elections, a PBC still exists in social security suggesting that deficits are being driven by current rather than capital spending. With the increasing calls for the basic income grant, consumption spending in social services might increase. Because the government's provision of public goods and services is constrained to the use of debt and taxes, there is need to increase spending in capital expenditure rather than consumption expenditure in order to curb the widening budget deficit and higher peak in public debt as capital spending will create economic opportunities.

This is not to say government should drastically reduce spending on welfare given the unprecedented levels of poverty, inequality and unemployment but rather, spending on welfare should not be politically motivated and should focus on livelihood promotion effects which per Black et. al “involve sustainable poverty reduction through promotion of higher living standards in the long term” rather than focusing on current consumption smoothing (Black, Calitz and Steenkamp, 2015, p.180). The allocations towards employment programmes which are launched in election years have not yielded the intended results and have merely succeeded in creating cycles thus the government should look at directing the funds towards credit provision for SMMEs or other alternative strategies that can potentially increase employment.

There is a gap for further research on the impact of political budget cycles in social security on economic growth. This is because South Africa is faced with a two-fold problem of high poverty and slow growth such that there are opportunity costs involved in whichever spending decisions the government makes, that is, increasing welfare spending to address poverty or increasing spending on infrastructure for economic growth which may lead to more people becoming economically active. Further research would thus look at whether there is a cause and effect relationship between high politically motivated social spending and slow economic growth.

13. References

Abramowitz, A. (1980). A Comparison Of Voting For U.S. Senator And Representative In 1978. *American Political Science Review, 74(3), pp. 633–640.*

Aidt, T. S., Veiga, F. J., and Veiga L. G. (2011). Election Results And Opportunistic Policies: A New Test Of The Rational Political Business Cycle Model. *Public Choice, 148(1-2), pp. 21-44.*

Alt, J. and Lassen D. (2006). Fiscal Transparency, Political Polarization, And Political Budget Cycles in OECD Countries. *American Journal of Political Science, 50 (2006), pp. 530-550*

Bohn, F. (2019). Political Budget Cycles, Incumbency Advantage, And Propaganda. *Economics and Politics, Issue 31, pp. 43-70*.

Black P., Calitz E., and Steenkamp T. (2015). Public Economics. Cape Town: Oxford University Press Southern Africa (Pty) Ltd.

Boylan, R. T. (2008). Political Distortions In State Forecasts. *Public Choice, 136, pp. 411-427.*

Brender, A. and Drazen A. (2005). Political Budget Cycles In New Versus Established Democracies. *Journal of Monetary Economics, 52, pp. 1271-1295.*

Cox, G. W. and McCubbins, M. D. (1986). Electoral Politics A Redistributive Game. *Journal of Politics, 48, pp. 370-389*

Downs, A. (1957). An Economic Theory of Political Action in a Democracy. *Journal of Political Economy, 65(2), pp. 135-150*

Gordon, S. C., Huber, G. and Landa, D. (2009). Voter Responses To Challenger Opportunity Costs. *Electoral Studies 28(1), pp. 79-93.*

Garofalo P., Lema D., and Streb J.M. (2019). Political Budget Cycles And Voting Within A Federal Country: The Influence Of Political Alignment. *Economics and Politics Journal 32(1), pp. 305-334*

Kopits G., and Craig, J. (1998). Transparency in Government Operations. IMF Occasional Paper No. 158 (Washington: International Monetary Fund), p.1. Availabe at https://www.imf.org/external/pubs/ft/op/158/op158.pdf. [Accessed August 15, 2021]

Kouvavas, O. (2013). Political Budget Cycles Revisited, The Case For Social Capital. MPRA Paper 57504, UniversityLibrary of Munich. Available at https://ideas.repec.org/p/pra/mprapa/57504.html. [Accessed November 10, 2021]

Kramer, G. H. (1971). Short-Term Fluctuations in U.S. Voting Behaviour, 1896-1964. *The American Political Science Review, pp. 131-143.*

Kroth, V. (2012). Political Budget Cycles and Intergovernmental Transfers in a Dominant Party Framework: Emperical evidence from South Africa. Available at http://www.tinyurl.com/mfaevjx. [Accessed July 6, 2021]

Lindbeck, A., and Weibull, J. W. (1987). Welfare Effects of Alternative Forms of Public Spending. *Public Choice, 52, pp. 273-297.*

Lohmann, S. (1998). Rationalizing The Political Business Cycle: A Workhouse Model. *Economics and Politics, 10, pp. 1-17.*

Gigaba M. (2018). Budget Speech. Available at http://www.treasury.gov.za/documents/national%20budget/2018/speech/speech.pdf. [Accessed August 16, 2021]

Manuel T. (2004). Budget Speech. Available at http://www.treasury.gov.za/documents/national%20budget/2004/speech/Speech.pdf. [Accessed October 23, 2021]

Mboweni T. (2019). Budget Speech. Available at http://www.treasury.gov.za/documents/national%20budget/2019/speech/speech.pdf. [Accessed August 18, 2021]

National Treasury. Budget Highlights. Available at http://www.treasury.gov.za/documents/National%20Budget/2021/sars/Budget%202021%20Highlights.pdf. [Accessed October 23, 2021]

National Treasury. National Budget. Available at http://www.treasury.gov.za/documents/national%20budget/default.aspx. [Accessed August 5, 2021]

National Treasury. Provincial Budgets. Available at http://www.treasury.gov.za/documents/provincial%20budget/default.aspx. [Accessed January 5, 2022]

National Treasury (2004). Budget Guide. Available at http://www.treasury.gov.za/documents/national%20budget/2004/English-Afrikaans%20Guide%202004%2010%20Feb.pdf. [Accessed August 5, 2021]

National Treasury (2014). Budget Highlights. Available at http://www.treasury.gov.za/documents/national%20budget/2014/guides/2014%20Budget%20Highlights.pdf. [Accessed August 5, 2021]

National Treasury (2016). Explanatory memorandum to the division of revenue. Available at http://www.treasury.gov.za/documents/national%20budget/2016/review/Annexure%20W1.pdf. [Accessed August 20, 2021]

National Treasury (2018). Budget Highlights. Available at http://www.treasury.gov.za/documents/national%20budget/2018/sars/Budget%202018%20Highlights.pdf. [Accessed August 16, 2021]

National Treasury (2021). Budget Data And Time Series In Excel Format. Available at http://www.treasury.gov.za/documents/national%20budget/2021/excelFormat.aspx. [Accessed August 1, 2021]

Nordhaus, W. D. (1975). The Political Business Cycle. *Oxford Journals, 42(2), pp. 169-190*

Orgeret K. S. (2008). From His Master's Voice and Back Again? Presidential Inaugurations and South African Television: The Post Apartheid Experience. *African Affairs, 107 (429), pp. 611-629.*

Persson, T., and Tabellini, G. (2003). The Economic Effect Of Constitutions: What Do The Data Say. *Cambridge: MIT Press.* Available at http://www.people.fas.harvard.edu/~iversen/PDFfiles/Persson&Tabellini2003.pdf?origin=publication. [Accessed August 18, 2021]

Rogoff, K. (1990). Equilibrium Political Budget Cycles. *American Economic Review, 80(1), pp. 21-36.*

Schneider, C. (2010). Fighting with One Hand Tied behind the Back: Political Budget Cycles in the West Germany. *Public Choice, 142(1/2), pp. 125-150.*

Schuknecht, L. (2000). Fiscal Policy Cycles and Public Expenditure in Developing Countries. *Public Choice,* 102(1/2), pp. 115-130.

Schulz-Herzenberg C. (2020). The South African non-voter: An analysis. Available at https://www.kas.de/documents/261596/10543300/The+South+African+non-voter+-+An+analysis.pdf/acc19fbd-bd6d-9190-f026-8d311078b670?version=1.0&t=1608. [Accessed August 26, 2021]

Shahor, T. (2013). Election Year Economics And Political Budget Cycle In Israel - Myth Or Reality. *Israel Affairs, 19(4), pp. 713-730.*

Shi, M., and Svensson, J. (2002). Political Budget Cycles in Developed and Developing Countries. *Stockholm Institute for International Economic Studies.* Available at https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.202.8595&rep=rep1&type=pdf. [Accessed August 20, 2021]

Shi, M., and Svensson, J. (2002). Conditional Political Budget Cycles. *Public Choice* 157, 387-410

Shi, M., and Svensson, J. (2003). Political Budget Cycles: A Review of Recent Developments. *Nordic Journal of Political Economy, 29, pp.67-76.*

Shi, M., and Svensson, J. (2006). Political Budget Cycles: Do They Differ Across Countries and Why? *Journal of Public Economics, 90, pp. 1367-1389.*

Stanford, C., Landa, G., and Landa, D. (2009). Do the Advantages of Incumbency Advantage Incumbents? T*he University of Chicago Press Journals, 71(4), pp.1481-1498.*

Statistics South Africa (2019). A breakdown of the tax pie .Available at http://www.statssa.gov.za/?p=12238. [Accessed October 8, 2021]

Statistics South Africa (2021). National Poverty Lines. Available at http://www.statssa.gov.za/publications/P03101/P031012021.pdf. [Accessed 28 October, 2021]

The Constitution of the Republic of South Africa (1996).

Transparency International (2013). *Corruption Perceptions Index.* Available at https://www.transparency.org/en/cpi/2013. [Accessed 28 October, 2021]

Tufte, E. (1978). Political Control of the Economy. Princeton, New Jersey: Princeton University Press.

Veiga, L. G., and Efthyvoulou, G. (2018). Political Budget Cycles: Conditioning Factors And New Evidence. NIPE* W21/2018

Whelan P. (2016). 'State capture' in SA is a buzzword more accurately defined as 'Zuma capture'. Available at http://www.bdlive.co.za/opinion/2016/03/22/state- capture-in-sa-is-a-buzzword-more-accurately-defined-as-zuma-capture. [Accessed 20 January, 2022]

World Bank. Demographic Data. Available at https://data.worldbank.org/country/ZA. Accessed [30 January, 2022]

Annexure

Provincial Data Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Year	18			2002	2019
Limpopo Conditional Grant	18	5.18e+09	2.80e+09	1.33e+09	9.06e+09
Limpopo Equitable Share	18	3.43e+10	1.47e+10	1.24e+10	5.90e+10
Limpopo GDP	18	2.14e+11	9.75e+10	8.08e+10	3.74e+11
Eastern Cape Conditional Grant	18	6.91e+09	3.71e+09	1.76e+09	1.21e+10
Eastern Cape Equitable Share	18	4.18e+10	1.64e+10	1.83e+10	6.88e+10
Eastern Cape GDP	18	2.30e+11	9.80e+10	9.17e+10	3.87e+11
Free State Conditional Grant	16	4.66e+09	2.12e+09	1.62e+09	7.86e+09
Free State Equitable Share	18	1.65e+10	6.84e+09	6.53e+09	2.82e+10
Free State GDP	18	1.54e+11	6.07e+10	6.83e+10	2.53e+11
Gauteng Conditional Grant	18	1.33e+10	6.25e+09	3.57e+09	2.31e+10
Gauteng Equitable Share	18	5.07e+10	2.70e+10	1.79e+10	9.34e+10
Gauteng GDP	18	1.02e+12	4.38e+11	4.13e+11	1.75e+12
KwaZulu-Natal Conditional Grant	18	1.12e+10	6.64e+09	2.21e+09	2.11e+10
KwaZulu-Natal Equitable Share	18	5.98e+10	2.81e+10	2.13e+10	1.06e+11
KwaZulu-Natal GDP	18	4.82e+11	2.00e+11	2.01e+11	8.07e+11
Mpumalanga Conditional Grant	18	4.37e+09	2.73e+09	8.12e+08	8.24e+09
Mpumalanga Equitable Share	18	2.30e+10	1.08e+10	8.00e+09	4.14e+10
Mpumalanga GDP	18	2.21e+11	1.01e+11	8.58e+10	3.82e+11
North West Conditional Grant	18	4.16e+09	2.48e+09	7.91e+08	7.69e+09
North West Equitable Share	18	1.96e+10	8.36e+09	9.03e+09	3.50e+10
North West GDP	18	1.65e+11	5.00e+10	7.93e+10	2.08e+11
Northern Cape Conditional Grant	18	2.43e+09	1.54e+09	2.70e+08	4.69e+09
Northern Cape Equitable Share	18	7.36e+09	3.63e+09	2.49e+09	1.34e+10
Northern Cape GDP	18	6.34e+10	2.58e+10	2.55e+10	1.03e+11
Western Cape Conditional Grant	18	7.25e+09	3.80e+09	2.02e+09	1.28e+10
Western Cape Equitable Share	18	2.69e+10	1.37e+10	1.00e+10	5.13e+10
Western Cape GDP	18	4.13e+11	1.69e+11	1.72e+11	6.92e+11